

# **Chronic Wasting Disease**

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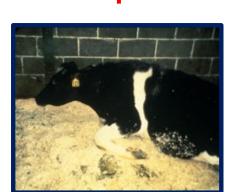
September 29, 2021 Joint Hearing
Texas House of Representatives
Agriculture and Livestock Committee
Culture, Recreation and Tourism Committee



# Introduction to Prion Disease



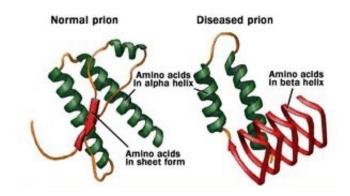
CJD/vCJD Humans



**BSE** Cattle



**Scrapie**Sheep and Goats



"TSEs"



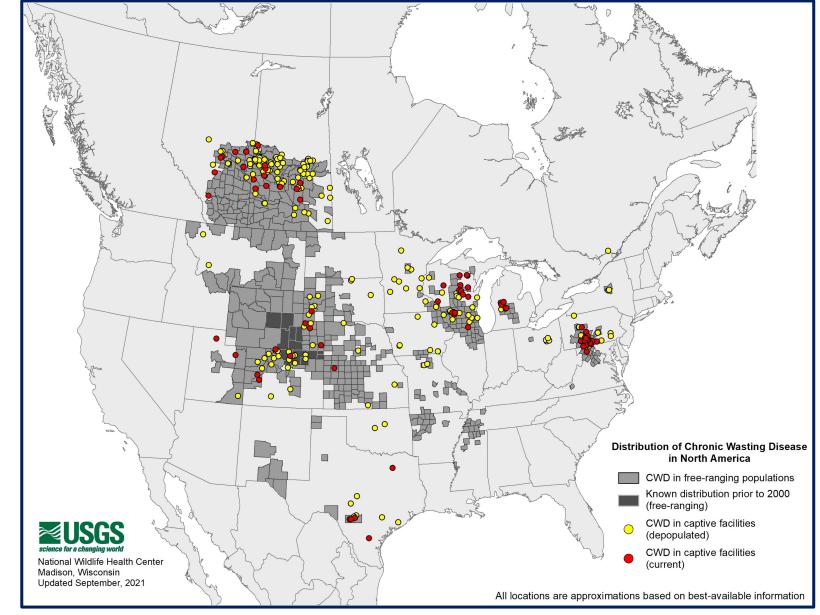
**Kuru** Humans



**CWD** Cervids

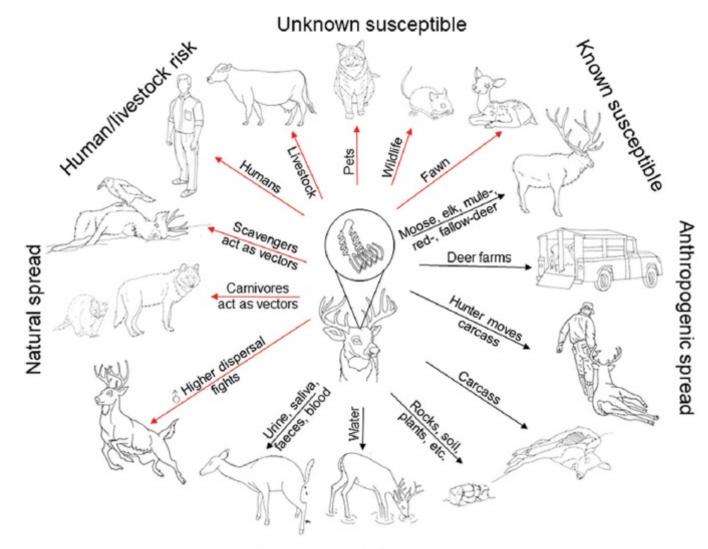


**Chronic Wasting Disease (CWD)** 





# **Chronic Wasting Disease (CWD)**





# **CWD** Epidemiology

## **Amplification Factors:**

- Degree of animal movement
- Population density
- Cumulative environmental contamination

Fomite transmission

Escapes

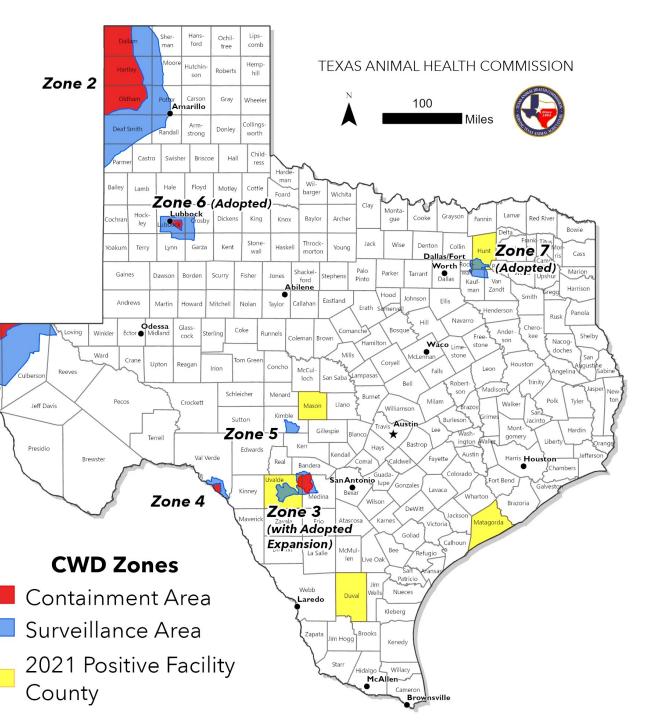
Run-off

**Contaminated Feed?** Veterinary practices? Reproductive practices? CWD susceptible species movement **DOMESTIC CYCLE** 





Zone 1





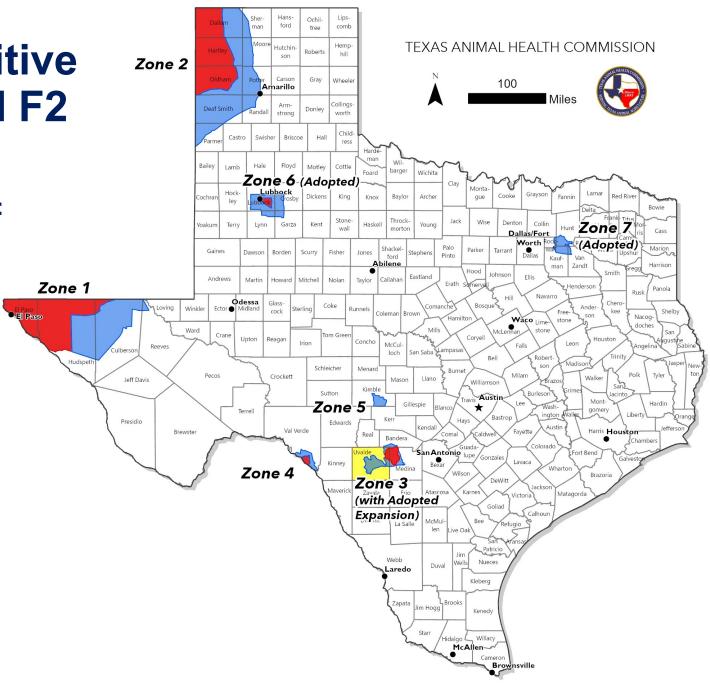
# **Summary of Positive Facilities:**

Facility	County	HCP?	Herd Size	Herd Closed?	Disposition
1	Uvalde	Yes	102	~4 years	Scheduling Depopulation
2	Uvalde	Yes	486	No	Scheduling Depopulation
3	Hunt	Yes	380	~5 years	Presented Herd Plan
4	Matagorda	Yes	221	No	Depopulated
5	Mason	Yes	93	No	Depopulated
6	Uvalde	No	870	No	Pending Herd Plan
7	Duval	No	188	No	Pending Herd Plan



### F1 and F2 (Breeder Facilities):

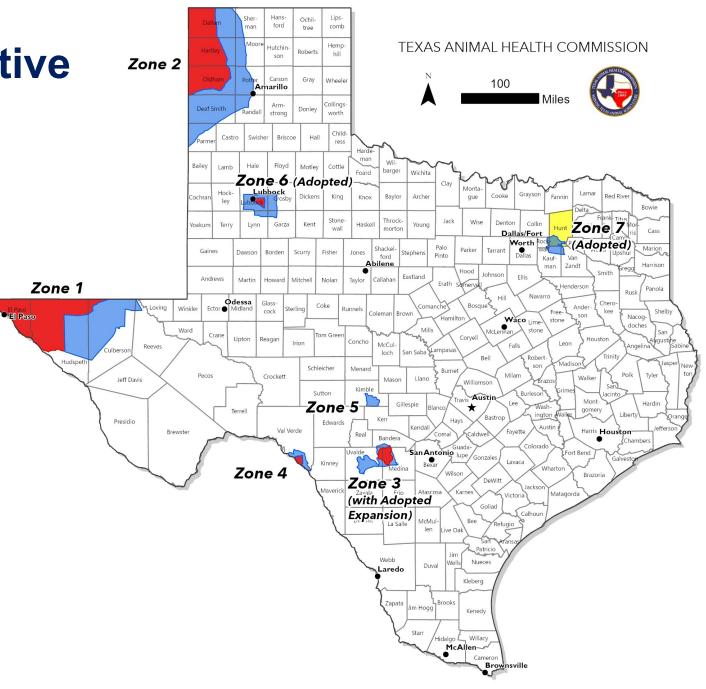
- Discovered after banked samples were CWD tested
  - Earliest sample from September 2020
- Both facilities are closely associated and share common management
- CWD has been detected in most of the pens in both facilities





### F3 (Breeder Facilities):

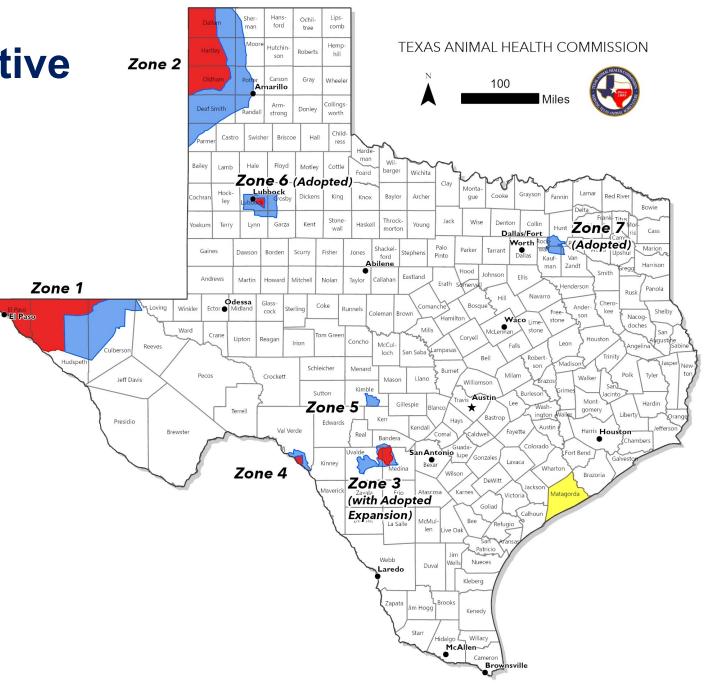
- Index discovered after routine postmortem surveillance testing
  - 4 additional positives found from rectal testing
- Breeding facility surrounded by contiguous release site





### F4 (Breeder Facilities):

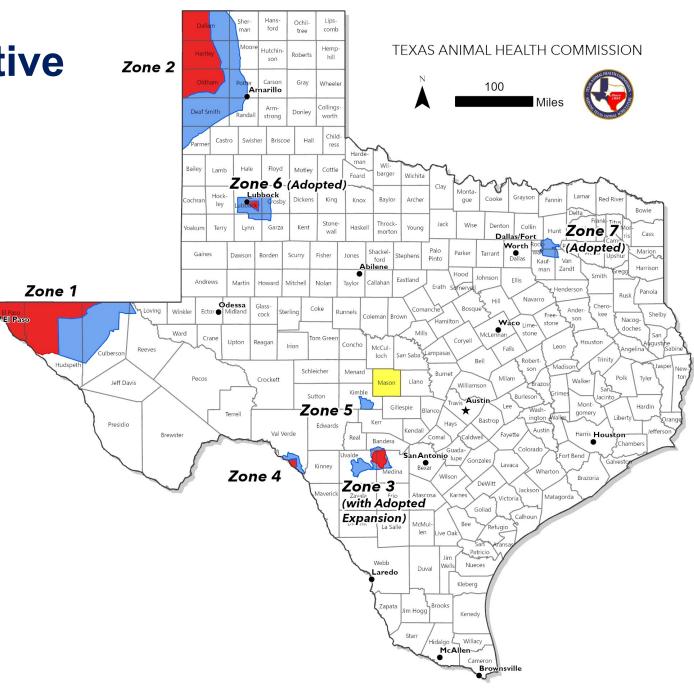
- Discovered as a trace out from F2
  - Trace animal entered on 10/16/2020
- No further positives discovered on depopulation
- Breeding facility surrounded by contiguous release site





### F5 (Breeder Facilities):

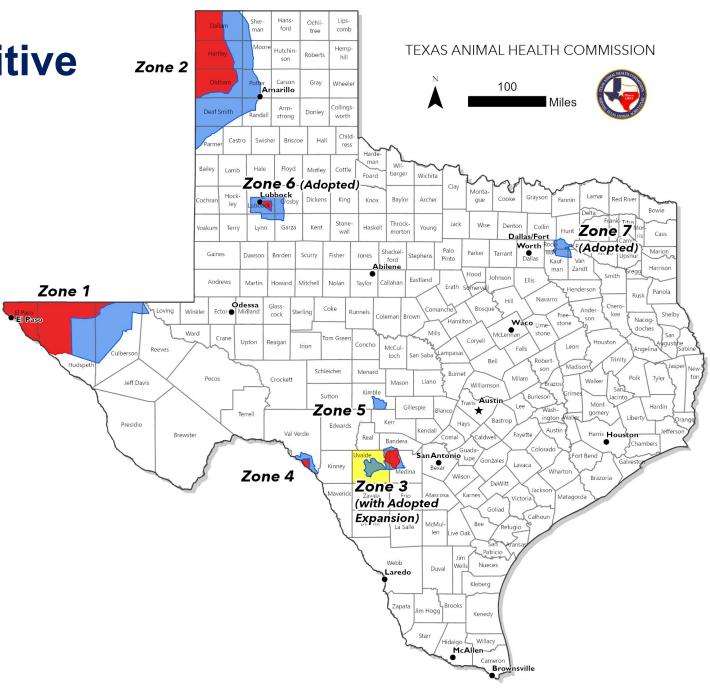
- Discovered as a trace out from F1
  - Trace animal entered on 10/14/2020
- No further positives found on depopulation
- Breeding facility surrounded by contiguous release site
  - Additional breeding and nursing facility are in close proximity





#### **F6** (Breeder Facilities):

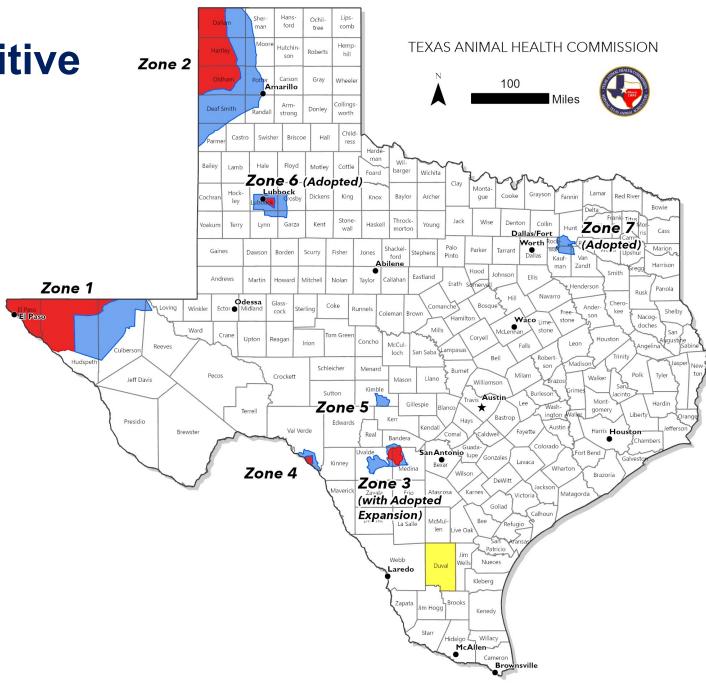
- Discovered as a trace out from F1
  - Trace animal entered on 9/30/2019
- Breeding facility in close proximity to exotic CWD susceptible species
- Located:
  - 7.5 miles from F1 and F2



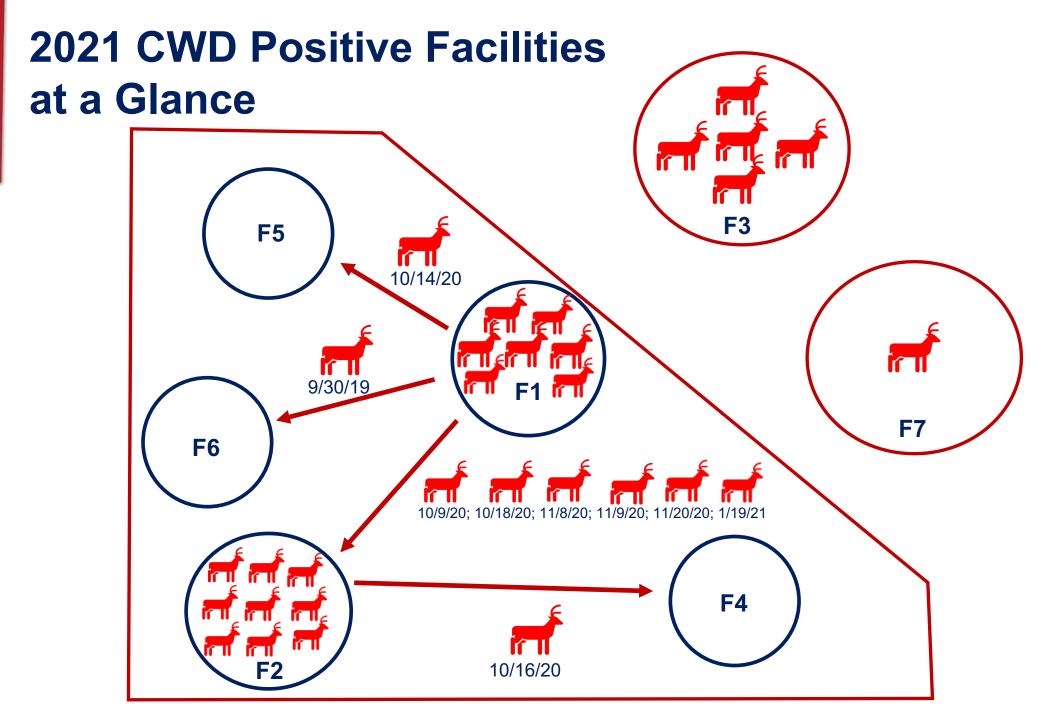


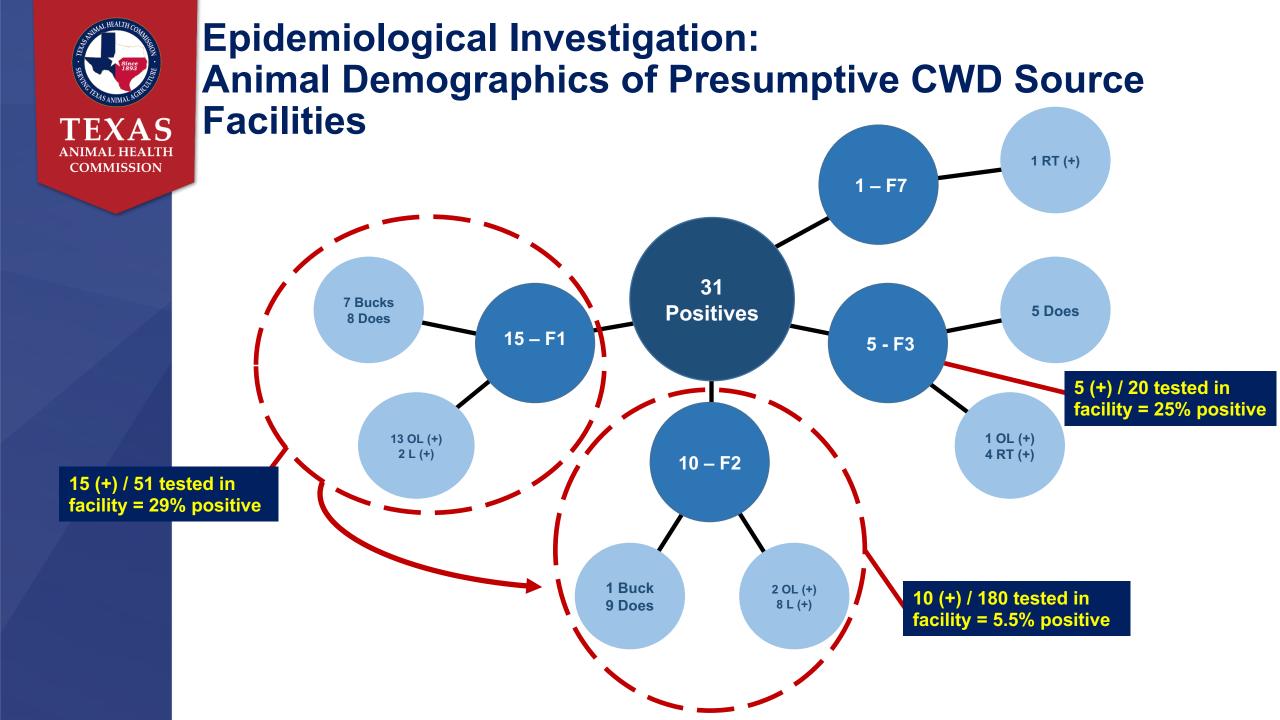
### F7 (Breeder Facility):

- 1 3-year old doe, rectal positive
  - Testing occurred prior to release as well as for antemortem substitution
  - 59 animals total rectal tested
- PM tested 5 animals in past 5 years
  - Submitted 227 rectal biopsies to remain MQ
- 175 trace deer and 20 trace facilities
  - Majority of trace deer sent to release sites and have not been CWD tested.











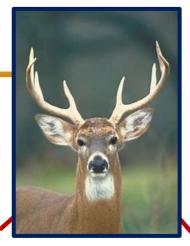
# **Risk-based Containment Strategy**

#### **All Breeding Facilities:**

- Test all mortalities.
- Test all WTD going to release sites.

#### **Exposed Facilities:**

- Quarantine/Hold Order until testing completed.
- Test all exposed WTD.
- Herd plans to those with untested, exposed WTD.



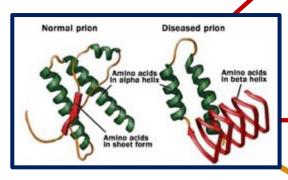
Host

#### **Captive Cervids:**

- Test exposed animals to detect any positives ASAP.
- Disinfection measures for positive facilities.

#### **Free-ranging Cervids:**

 Establish zones to stop carcass movement and require CWD testing.



**Agent** 

#### **LIMITED AGENT INTERVENTIONS:**

- No cure.
- No vaccine.
- Extremely resistant to disinfection

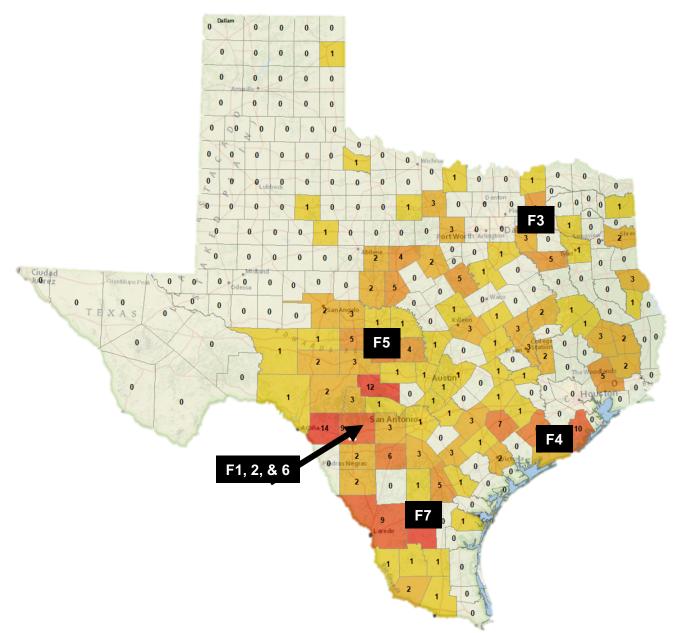


**Environment** 



## **Herd Plan and Trace Progress**

- 318 Trace Facilities:
  - 181 breeder facilities
  - 119 release sites
  - 8 Out-of-State
  - 4 Nursing Facilities
  - 6 DMP Sites
- 87 trace facilities enrolled in HCP
  - 15 are Certified
- Trace Evaluations:
  - 202 (64%) completed
  - 116 (36%) pending





# TAHC CWD Herd Certification Program (HCP)

- Voluntary herd status program for species that are susceptible to CWD initiated in 1999
- Total enrollments to date: 292
  - First Year: 25
  - Second Year: 11
  - Third Year: 23
  - Fourth Year: 58
  - Fifth Year: 37
  - Certified: 130
  - Applications Accepted: 6
  - Applications Pending: 1
  - Pending Investigation: 1



# TAHC CWD Herd Certification Program (HCP)

- Rules and Requirements to comply include:
  - Enrollment
  - Testing
  - Identification
  - Recordkeeping
  - Inspections
  - Fees





## Postmortem & Antemortem Collectors

- Postmortem Sample Collectors:
  - 2,234 individuals trained
  - 939 currently Authorized
- Antemortem Sample Collectors:
  - 293 veterinarians trained
  - 260 currently Authorized

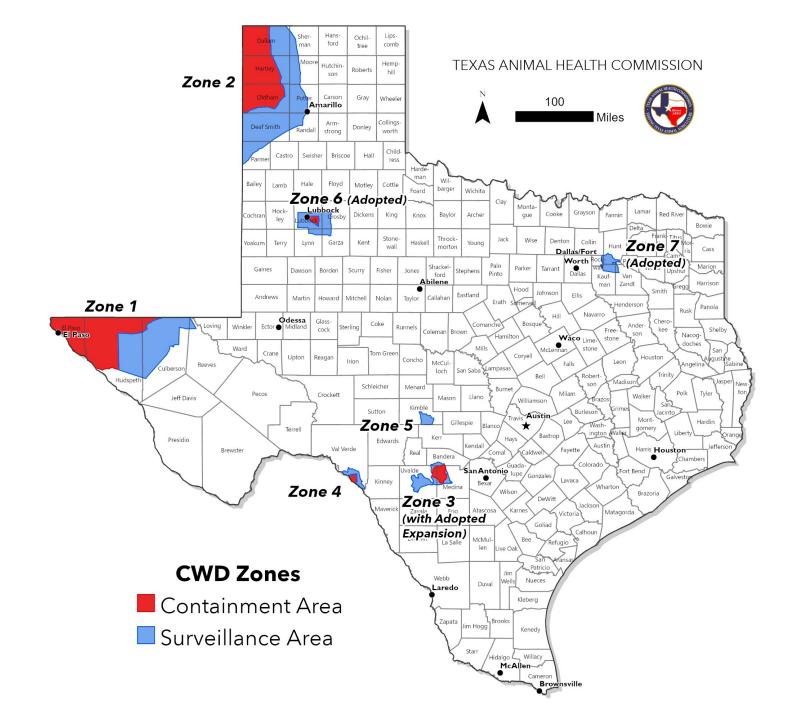




## **Containment and Surveillance Zones**

- Geographic area in which it has been determined CWD exists and surveillance is necessary
- Each proposed zone aligns with zones developed in consultation with TPWD in response to the recently confirmed CWD positive cases.
- Current zones in Texas:
  - 5 containment zones
  - 7 surveillance zones







# CWD Susceptible Species Rules & Requirements



# **TAHC Summary of Adopted Rules**

Issue	Current	Amended Rules, Effective October 14, 2021	
Definitions	4 TAC §40.1	Add definitions for clarification, including "commingling"	
Minimum Mortality Rate	N/A	5%	
Fence Height	N/A	8 feet	
Reporting Escaped, Disappeared Deer	4 TAC §40.1 Five business days	72 hours	
Sample Submission Timeframe	N/A	7 days	
Movement Restriction Zones	4 TAC §40.6	Extends existing Surveillance Zone 3 in Uvalde County, and adds Containment Zone 6 in Lubbock County, Surveillance Zone 6 in Lubbock, Lynn, Crosby and Garza counties, and Surveillance Zone 7 in Hunt, Kaufman, Rockwall and Van Zandt counties	
Enforcement and Penalties	Tx. Agric. Code 161.148 Up to \$1,000 per day a violation continues or occurs	Tx. Agric. Code 161.148 & 4 TAC 40.8 Up to \$5,000 per day a violation continues or occurs	



# **TAHC Movement Requirements**

- In order to move exotic CWD susceptible species:
  - Intrastate
    - Animals shall be officially identified
    - Owner must first obtain a Premises Identification Number (PIN)
    - Must complete a movement record form and submit to the TAHC
    - An owner of a premises where exotic CWD susceptible species are located within a high fence must keep herd records that include an annual inventory and mortality log.
       The inventory must be submitted to the TAHC on or before April 1 of each year.
  - Interstate
    - Must obtain an entry permit
      - Request 10 days prior to entry date
      - Applicants must identify the herd of origin and herd of destination on both the permit application and the Certificate of Veterinary Inspection
      - Cervids shall be identified by a minimum of two official/approved unique identifiers
      - The cervids must meet the herd status or tuberculosis testing requirements
      - Applicant must provide documentation of cervid's successful participation in a complete CWD HCP in compliance with the interstate movement requirements of the USDA CWD Program Standards and the Code of Federal Regulations for a minimum of five years



# **TAHC Surveillance Requirements**

- The owner of a premises with exotic CWD susceptible species shall:
  - Test all eligible mortalities for CWD until three animals are tested and valid test results are obtained
  - Ensure the samples are properly collected and submitted in compliance with the collection requirements
  - Report the test results to TAHC within 30 days of receiving the test results
- A herd owner may voluntarily enroll in the Herd Certification Program. The enrolled herd would then be subject to more stringent surveillance requirements.



# **TAHC Reporting Requirements**

## Mortality Record Form

- The owner of a premises where an exotic CWD susceptible species eligible mortality occurs must maintain mortality records (regardless of movement)
- The records must be submitted to the TAHC every year, and records shall be retained for one year from the date of submission

### Movement Record Form

- Must accompany all exotic CWD susceptible species moving and be provided to any market selling these species
- Due to the TAHC within 48 hours of movement

## Estimated Annual Inventory

 If moving exotic CWD susceptible species, owners must submit estimated annual inventories to the TAHC every year



# **TAHC CWD Movement Restriction Zones**

#### Movement

• No exotic CWD susceptible species may be transported outside the CZ unless from a herd with a Certified status as established through §40.3(c)(6).

#### Released Animals

No exotic CWD susceptible species may be released within the CZ outside a high fence premises.

#### Testing

All exotic CWD susceptible species, 16 months of age or older, that are hunter-harvested shall be tested for CWD. No part of a carcass of a CWD susceptible species, either killed or found dead may be removed from the CZ unless a testable CWD sample from the carcass is collected and tested. The results shall be provided to the commission or TPWD within 30 days of receiving the test results.

#### **Carcass Movement Restrictions**

• No part of a carcass of a CWD susceptible species, either killed or found dead, within the CZ may be removed from the CZ unless the person to transport any part of that carcass follows certain requirements listed in §40.6(e).

#### Escaped Animals

 Any escaped exotic CWD susceptible species which originated or resided in a CZ shall be captured and returned to the high fence premises of origin.

#### **Herd Plans**

• Facilities and associated properties in the CZ that have been issued a herd plan shall operate in accordance with the herd plan requirements as determined by the commission.

#### Identification

 All exotic CWD susceptible species released in a CZ shall be identified with a visible official identification device, which may include an eartag that conforms to the USDA alphanumeric national uniform ear tagging system and/or an animal identification number (AIN), which may include a RFID device. If a CWD susceptible species is released into a high fence premises, the animal shall retain the acceptable official identification. 28



# Thank you

Dr. Andy Schwartz



